

Prof. Akio Niimi: the clinical identification of cough variant asthma

Submitted Dec 04, 2013. Accepted for publication Dec 23, 2013.

doi: 10.3978/j.issn.2072-1439.2013.12.53

View this article at: <http://dx.doi.org/10.3978/j.issn.2072-1439.2013.12.53>

Dr. Akio Niimi is the Professor of Department of Medical Oncology and Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan (Figure 1).

He trained in Chest Disease Research Institute, Kyoto University in 1985-1987, and then he worked in Respiratory Medicine, Wakayama Red Cross Hospital in the next two years. From 1989 through 2012 Dr. Niimi worked in Kyoto University Hospital and promoted to Associate Professor in 2008, and to Head of Respiratory Medicine in 2011. During 2002-2003, Dr. Niimi conducted his post-doctoral research under the supervision of Prof. Kian Fan Chung, in National Heart & Lung Institute, Imperial College London, UK.

Now Dr. Niimi is the Professor and Head of Respiratory Medicine in Nagoya City University. His major clinical fields are Respiratory Medicine, Asthma, Allergy, and Chronic cough. His main research interest focuses on inflammatory mechanisms of chronic cough, diagnosis and treatment of chronic cough, pathogenesis and therapeutic strategies of refractory asthma base on phenotypic classification, small airways in asthma, radiologic assessment of airway remodeling, and noninvasive assessment of airway inflammation.

We had interviewed Prof. Niimi in the 1th International Cough Conference. Prof. Niimi gave a wonderful speech on "Asthma/Eosinophilic Bronchitis and Atopic Cough—Overlap syndromes or distinct disease?" This interview is the expansion of Prof. Niimi's speech.

JTD: *We all know that cough can be caused by many diseases of airway, such as bronchitis and allergy, and how do we differentiate them clinically?*

Prof. Niimi: One point is the duration of cough. The cough subsiding within three weeks is mainly caused by upper respiratory infection or posterior infectious cough. And if the duration prolongs, non-infectious causes predominate, such as asthma, cough variant asthma (CAV), gastroesophageal reflux disease, sinobronchial syndrome and so on.

JTD: *Is it difficult to identify?*

Prof. Niimi: Yes, it is sometimes difficult to identify



Figure 1 Professor Akio Niimi.

the cause especially in case of chronic cough. Another important point is the primary medical examinations such as chest X-Ray and spirometry. In cases with cough lasting three weeks or longer, these tests are mandatory.

JTD: *And could you please give us a brief introduction about the relations among the atopic cough, eosinophilic bronchitis and asthma?*

Prof. Niimi: Yes, that is related to my talk of yesterday. CAV is very similar to asthma. The only difference is the absence of wheeze and dyspnea that is typically present in asthma. In contrast, atopic cough lacks airway hyperresponsiveness, airflow obstruction, and response to bronchodilators. Eosinophilic bronchitis may be an intermediate between these two, but its definition may depend on the authors. Some patients with CAV with mild airway responsiveness may be included in eosinophilic bronchitis.

JTD: *I have learned that your research focuses on the Cough Variant Asthma, so how to identify the CVA at early stage?*

Prof. Niimi: Medical history is important. Cough often predominates in the night or early evening. And patients often complain that their cough disturbs the sleep. There is seasonality of their symptoms. Cough often gets worse in the spring and autumn. Also, the patients often have atopic predisposition such as nasal allergy. The most simple and specific way to identify CVA is to see responsiveness to broncho-dilators.

JTD: *Are there any differences between the causes of chronic cough in China and in Japan?*

Prof. Niimi: Well, I have read several papers from China regarding the cause of chronic cough. I don't think there are many differences between China and Japan. My interest is involvement of the upper airway disease. There is an entity called sinobronchial syndrome in Japan, which is a mixture of chronic sinusitis and neutrophilic inflammations in lower airway. But in Chinese papers, I haven't seen that diagnosis; even we are in the same origin East Asia. I don't know what causes the differences of this. I have examined some sinobronchial syndrome patients in China, but I haven't seen such reports.

JTD: *Currently, many researches focus on the medicine of respiratory disease. And how is the future development of it?*

Prof. Niimi: We feel that some common mechanisms may exist in patients with cough, and now this has been called cough hypersensitivity syndrome. I think that gastroesophageal reflux disease (GERD) may be common in patients with refractory cough. One may have asthma, but they also have GERD. Treatment of both diseases is necessary in such cases. Therefore, we would like to study the involvement of GERD further. I am very much interested in GERD.

JTD: *In your perspective, what are the challenges and opportunities of the international cooperation and communication of medicine?*

Prof. Niimi: The conference like this is very important. We discussed more and more and we enjoyed it very much. We are happy to be here and we would like have more chances like this to communicate with each other.

JTD: *And what is the biggest barrier to join the meeting?*

Prof. Niimi: Economy and language are important issues. I think many of the audience are clinicians, working in hospitals or clinics and seeing many patients. Thus some discrepancies may be present between the feelings of audience and speakers or specialists. We should try to avoid this. We would like to discuss together.

JTD: *As we know that we need to write in English in SCI, but as your mother tongue is Japanese, and our mother tongue is Chinese. So, are there any difficulties to write good paper in English?*

Prof. Niimi: As for the problem that we have to write the SCI paper in English, we think that the original research papers should be published in English to be recognized worldwide. But many people in Japan are not familiar with English, so we publish the original articles in English and we also write similar things in Japanese literature, not as original articles, but as the review articles.

JTD: *Could you please share with us your research experience and what is the quality of a good researcher?*

Prof. Niimi: First of all, we need to be original and unique. We should not do the same things as other researchers. We have to find something new and that is the most important issue. To construct a good study, the methodology is important. And finally, we need to write. We need to try to write them to submit so that the reviewers can give fruitful comments to us. Reviewers are the most important teachers of research.

JTD: *Thank you very much for today's interview. Nice talking with you.*

Acknowledgements

Disclosure: The author declares no conflicts of interest.

(Science Editor: Betty Zhang, JTD, jtd@thebpc.org)

Cite this article as: Zhang B, Prof. Akio Niimi: the clinical identification of cough variant asthma. *J Thorac Dis* 2014;6(S7):S762-S763. doi: 10.3978/j.issn.2072-1439.2013.12.53